

Claims

1. A high ratio epicyclic gear assembly comprising two high torque planetary trains through which power flows via two parallel paths in one or other of which is an intermediate star train with a low torque differential train or gear which transmits the combined power in such a way that the high torque planetary trains share the total torque in a pre-determined ratio.
2. An assembly as in 1 in which the high torque planetary trains share their total torque equally.
3. An assembly as in 1 and 2 wherein the high torque trains may have the same or different ratios.
4. An assembly as claimed in any of the preceding claims wherein the differential train is a planetary train.
5. An assembly as in claim 4 when, dependent on claim 3, the high torque trains have 6 and 8 planets respectively and the intermediate and differential trains have 12 and 5 planets respectively.
6. An assembly as in claim 3 including an additional intermediate solar train in whichever power path does not have the intermediate star train.
7. An assembly as in claim 6 wherein the intermediate solar train is replaced by a planetary train.
8. An epicyclic inversion of any one of the assemblies as claimed in any one of the preceding claims including a gear case, wherein the gear case is a rotating transmission member and the planet carriers of the high torque planetary trains serve as the stationary reaction.